HT-F450K
HT-F453K
HT-F453HK
HT-F445K
HT-F455K

Digital Home Entertainment System

user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service,
please register your product at
www.samsung.com/register

SAMSUNG

Safety Warnings

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK).
NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
This symbol indicates “dangerous voltage” inside the product that presents a risk of electric shock or personal injury.	**CAUTION**: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.	This symbol indicates important instructions accompanying the product.

WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION

- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- The Mains plug is used as a disconnect device and shall stay readily operable at any time.
- This apparatus shall always be connected to an AC outlet with a protective grounding connection.
- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
PRODUCTO LÁSER CLASE 1

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.
Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION

- INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED, AVOID EXPOSURE TO BEAM.

Disc Storage & Management

- Holding Discs

  - Fingerprints or scratches on a disc may reduce sound and picture quality or cause skipping.
  - Avoid touching the surface of a disc where data has been recorded.
  - Hold the disc by the edges so that fingerprints will not get on the surface.
  - Do not stick paper or tape on the disc.

- Cleaning Discs
  - If you get fingerprints or dirt on a disc, clean it with a mild detergent diluted in water and wipe with a soft cloth.
  - When cleaning, wipe gently from the inside to the outside of the disc.
  - Disc Storage
    - Do not keep in direct sunlight.
    - Keep in a cool ventilated area.
    - Keep in a clean protection jacket and store vertically.

Licence

- ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX,LLC,a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.
- ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.
- DivX Certified® to play DivX® video, including premium content.
- DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.
- Covered by one or more of the following U.S. patents : 7,295,673; 7,460,668; 7,515,710; 7,519,274.

- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

- HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.
- This product uses some software programs which are distributed under the Independent JPEG Group.
- This product uses some software programs which are distributed under the OpenSSL Project.

Copyright

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Copy Protection

Many DVD discs are encoded with copy protection. Because of this, you should only connect your product directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected DVD discs.

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- Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance.
- An administration fee may be charged if either
  a. an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual)
  b. you bring the unit to a repair centre and there is no defect in the product (i.e. where you have failed to read this user manual).
- The amount of such administration charge will be advised to you before any work or home visit is carried out.

Disk and Format Compatibility

Disc types and contents your product can play

Media	Term	Disc Type
VIDEO	DVD	DVD-Video or DVD±R/±RW discs
	CD	Data CD (CD DA, CD-R/-RW)
	DivX	DVD±R/±RW, CD-R/-RW
MUSIC	MP3	CD-R/-RW
PHOTO	JPEG	CD-R/-RW

Disc types your product cannot play

- LD, CD-G/-I/-ROM, DVD-ROM/-RAM

| NOTE |

- DVD discs purchased abroad may not play on this product.
- This product may not respond to all operating commands because some DVD, and CD discs allow specific or limited operation and provide only certain features during playback. Please note that this is not a defect in the product.
- Samsung cannot guarantee that this product will play every disc bearing the DVD or CD logo because disc formats evolve, and problems and errors may occur during the creation of DVD, and CD software and/or the manufacture of discs.
- Please contact the SAMSUNG Customer Care Centre, if you have questions or encounter difficulty when playing DVD, or CD discs in this product. Also, refer to rest of this user manual for additional information on playback restrictions.
- Some commercial discs and DVD discs purchased outside your region may not play on this product.
- This product does not support DTS sound.

Supported Formats

Video File Support

Format	Supported Versions
AVI	DivX3.11~DivX6.8
WMV	V1/V2/V3/V7

Music File Support

Format	Bit Rate	Sampling Frequency
MP3	80~320kbps	44.1khz
WMA	56~128kbps	
AC3	128~384kbps	44.1/48khz

- Aspect Ratio : This product supports up to 720x576 pixels. TV screen resolutions higher than 800 will not be supported.
- When you play a disc whose sampling frequency is higher than 48khz or 320kbps, you may experience shaking on the screen during playback.
- Sections with a high frame rate might not be played while playing a DivX file.
- Since this product only provides encoding formats authorized by DivX Networks, Inc., a DivX file created by the user might not play.

Logos of Discs the product can play

DVD-VIDEO	AUDIO-CD	DivX

Region Code

Both products and discs are coded by region. These regional codes must match for a disc to play. If the codes do not match, the disc will not play. The Region Number for this product is displayed on the rear panel of the product.

Disc Type	Region Code	Area
DVD-VIDEO	1	The U.S., U.S. territories and Canada
	2	Europe, Japan, the Middle East, Egypt, Africa, Greenland
	3	Taiwan, Korea, the Philippines, Indonesia, Hong Kong
	4	Mexico, South America, Central America, Australia, New Zealand, Pacific Islands, Caribbean
	5	Russia, Eastern Europe, India, North Korea, Mongolia
	6	China

| NOTE |

- If the Region number of a DVDs does not correspond to the Region number of this product, the product cannot play the disc.

Notes on the USB connection

- Supported devices: USB storage media, MP3 player, digital camera
- If a folder or file name is longer than 10 characters, it may not properly display or operate.
- A subtitle file bigger than 300KB may not be properly displayed.
- A certain USB/digital camera device, USB card reader is not supported.
- FAT16 and FAT32 file systems are supported.
- Connect directly to the product's USB port. Connecting through another cable may raise problems with USB compatibility.
- Inserting more than one memory device to a multi-card reader may not operate properly.
- PTP protocol for digital camera is not supported.
- Do not disconnect USB device during a "Reading" process.
- Bigger the image resolution, the longer the delay to displaying.DRM applied MP3/WMA or video files downloaded from a commercial site are not played back.
- External HDD device is not supported.
- The maximum current supported by the USB port for an external device is 500 mA (at 5V DC).
- Supported file formats

Format	Still Picture	Music		Movie	
File name	JPG	MP3	WMA	WMV	DivX
File extension	.JPG .JPEG	.MP3	.WMA	.WMV	.AVI
Bit rate	–	80~320 kbps	56~128 kbps	4Mbps	4Mbps
Version	–	–	V8	V1,V2, V3,V7	DivX3.11~ DivX6.8
Pixel	640x480	–	–	720x576	
Sampling Frequency	–	44.1kHz	44.1kHz	44.1KHz~ 48KHz	

| NOTE |

- Playing back a JPEG file whose image resolution is higher than that of DVD may result in degraded image quality when displayed.

Accessories

Check for the supplied accessories below.

Video Cable

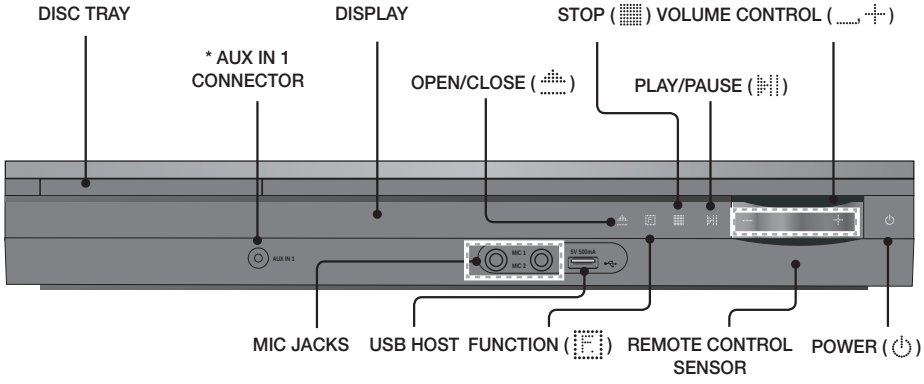
FM Cable

User manual

Remote Control/Batteries (AAA size)

HDMI Cable(option)

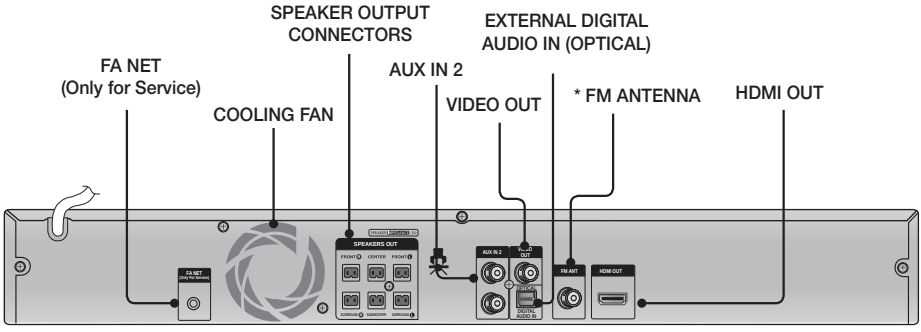
Front Panel



*** Connecting Audio from External Components**

Connect an Audio cable (not supplied) from the **AUX IN 1** jack on the front of the product to the Audio Out jack on your MP3 player. ⇨ Select the **AUX 1** mode.

Rear Panel



*** Connecting the FM Antenna**

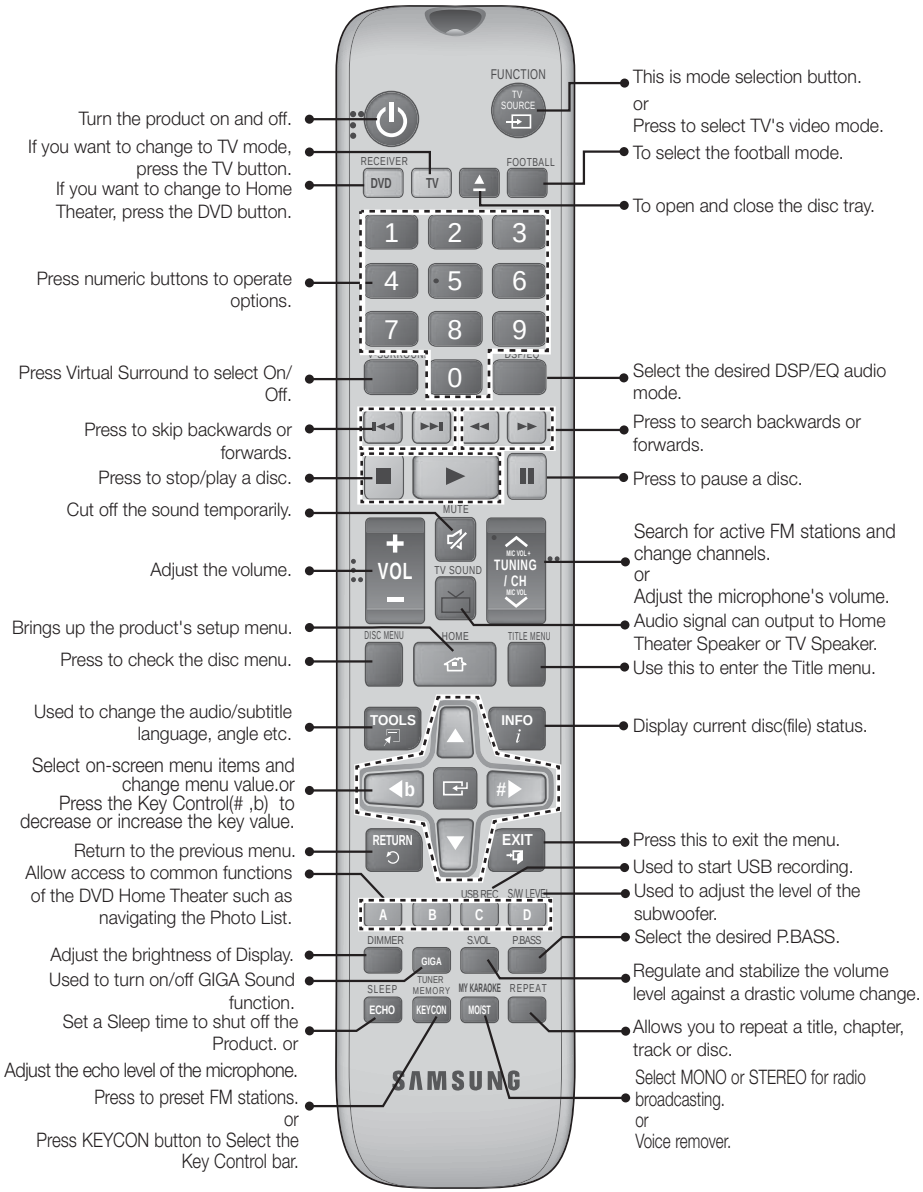
1. Connect the FM antenna supplied to the FM ANTENNA Jack.
2. Slowly move the antenna wire around until you find a location where reception is good, then fasten it to a wall or other rigid surface.

| NOTE |

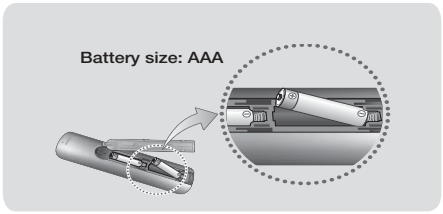
- Ensure a minimum of 10 cm of clear space on all sides of the home cinema to ensure adequate ventilation. Do not obstruct the cooling fan or ventilation holes.
- This product does not receive AM broadcasts.

Remote Control

Tour of the Remote Control


Turn the product on and off.
If you want to change to TV mode, press the TV button.
If you want to change to Home Theater, press the DVD button.
Press numeric buttons to operate options.
Press Virtual Surround to select On/ Off.
Press to skip backwards or forwards.
Press to stop/play a disc.
Cut off the sound temporarily.
Adjust the volume.
Brings up the product's setup menu.
Press to check the disc menu.
Used to change the audio/subtitle language, angle etc.
Select on-screen menu items and change menu value.or Press the Key Control(# ,b) to decrease or increase the key value.
Return to the previous menu.
Allow access to common functions of the DVD Home Theater such as navigating the Photo List.
Adjust the brightness of Display.
Used to turn on/off GIGA Sound function.
Set a Sleep time to shut off the Product. or
Adjust the echo level of the microphone.
Press to preset FM stations. or
Press KEYCON button to Select the Key Control bar.
This is mode selection button. or
Press to select TV's video mode.
To select the football mode.
To open and close the disc tray.
Select the desired DSP/EQ audio mode.
Press to search backwards or forwards.
Press to pause a disc.
Search for active FM stations and change channels. or
Adjust the microphone's volume.
Audio signal can output to Home Theater Speaker or TV Speaker.
Use this to enter the Title menu.
Display current disc(file) status.
Press this to exit the menu.
Used to start USB recording.
Used to adjust the level of the subwoofer.
Select the desired P.BASS.
Regulate and stabilize the volume level against a drastic volume change.
Allows you to repeat a title, chapter, track or disc.
Select MONO or STEREO for radio broadcasting. or
Voice remover.
FUNCTION
TV SOURCE
RECEIVER
DVD
TV
FOOTBALL
1 2 3
4 5 6
7 8 9
0
MUTE
VOL
TV SOUND
TUNING / CH
DISC MENU
HOME
TITLE MENU
TOOLS
INFO
RETURN
EXIT
USB REC
S/W LEVEL
A B C D
DIMMER
S.VOL
P.BASS
GIGA
SLEEP
TUNER MEMORY
MY KARAOKE
REPEAT
ECHO
KEYCON
MO/ST
SAMSUNG

Installing batteries in the Remote Control



| NOTE |

- Make sure to match the "+" and "–" ends of the batteries with the diagram inside the compartment.
- Assuming typical TV usage, the batteries last for about one year.
- The remote control can be used up to approximately 7 meters from the product in a straight line.

Setting the Remote Control

You can control certain functions of your TV with this remote control.

When operating a TV with the remote control

1. Press the **TV** button to set the remote control to TV mode.
2. Press the **POWER** button to turn on the TV.
3. While holding down the **POWER** button, enter the code corresponding to your brand of TV.
   - If there is more than one code listed for your TV in the table, enter one at a time to determine which code works.
   - **Example : For a Samsung TV**
     While holding down the **POWER** button, use the number buttons to enter 00, 15, 16, 17 and 40.
4. If the TV turns off, the setting is complete.
   - You can use the TV POWER, VOLUME, CHANNEL, and Numeric buttons (0~9).

| NOTE |

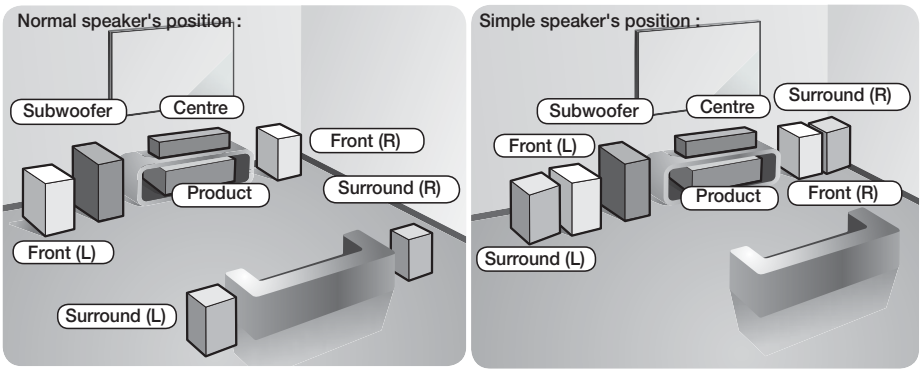
- The remote control may not work or some operations may not be possible with some brands of TVs.
- The remote control will work on a Samsung TV by default.

TV Control Codes

Brand	Code	Brand	Code
Admiral (M.Wards)	56, 57, 58	MTC	18
A Mark	01, 15	NEC	18, 19, 20, 40, 59, 60
Anam	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14	Nikei	03
AOC	01, 18, 40, 48	Onking	03
Bell & Howell (M.Wards)	57, 58, 81	Onwa	03
Brocsonic	59, 60	Panasonic	06, 07, 08, 09, 54, 66, 67, 73, 74
Candle	18	Penney	18
Cetronic	03	Philco	03, 15, 17, 18, 48, 54, 59, 62, 69, 90
Citizen	03, 18, 25	Philips	15, 17, 18, 40, 48, 54, 62, 72
Cinema	97	Pioneer	63, 66, 80, 91
Classic	03	Portland	15, 18, 59
Concerto	18	Proton	40
Contec	46	Quasar	06, 66, 67
Coronado	15	Radio Shack	17, 48, 56, 60, 61, 75
Craig	03, 05, 61, 82, 83, 84	RCA/Proscan	18, 59, 67, 76, 77, 78, 92, 93, 94
Croslex	62	Realistic	03, 19
Crown	03	Sampo	40
Curtis Mates	59, 61, 63	Samsung	00, 15, 16, 17, 40, 43, 46, 47, 48, 49,
CXC	03	Sanyo	19, 61, 65
Daewoo	02, 03, 04, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 34, 35, 36, 48, 59, 90	Scott	03, 40, 60, 61
Daytron	40	Sears	15, 18, 19
Dynasty	03	Sharp	15, 57, 64
Emerson	03, 15, 40, 46, 59, 61, 64, 82, 83, 84, 85	Signature 2000 (M.Wards)	57, 58
Fisher	19, 65	Sony	50, 51, 52, 53, 55
Funai	03	Soundesign	03, 40
Futuretech	03	Spectricon	01
General Electric (GE)	06, 40, 56, 59, 66, 67, 68	SSS	18
Hall Mark	40	Sylvania	18, 40, 48, 54, 59, 60, 62
Hitachi	15, 18, 50, 59, 69	Symphonic	61, 95, 96
Inkel	45	Tatung	06
JC Penny	56, 59, 67, 86	Techwood	18
JVC	70	Teknika	03, 15, 18, 25
KTV	59, 61, 87, 88	TMK	18, 40
KEC	03, 15, 40	Toshiba	19, 57, 63, 71
KMC	15	Vidtech	18
LG (Goldstar)	01, 15, 16, 17, 37, 38, 39, 40, 41, 42, 43, 44	Videch	59, 60, 69
Luxman	18	Wards	15, 17, 18, 40, 48, 54, 60, 64
LXI (Sears)	19, 54, 56, 59, 60, 62, 63, 65, 71	Yamaha	18
Magnavox	15, 17, 18, 48, 54, 59, 60, 62, 72, 89	York	40
Marantz	40, 54	Yupiteru	03
Matsui	54	Zenith	58, 79
MGA	18, 40	Zonda	01
Mitsubishi/MGA	18, 40, 59, 60, 75	Dongyang	03, 54

This section involves various methods of connecting the product to other external components.
Before moving or installing the product, be sure to turn off the power and disconnect the power cord.

Connecting the Speakers



Position of the product

Place it on a stand or cabinet shelf, or under the TV stand.

Selecting the Listening Position

The listening position should be located about 2.5 to 3 times the distance of the TV's screen size away from the TV.
Example : For 32" TV's 2~2.4m
For 55" TV's 3.5~4m

Front Speakers	Place these speakers in front of your listening position, facing inwards (about 45°) toward you. Place the speakers so that their tweeters will be at the same height as your ear. Align the front face of the front speakers with the front face of the center speaker or place them slightly in front of the center speakers.
Centre Speaker	It is best to install it at the same height as the front speakers. You can also install it directly over or under the TV.
Surround Speakers	Place these speakers to the side of your listening position. If there isn't enough room, place these speakers so they face each other. Place them about 60 to 90cm above your ear, facing slightly downward. * Unlike the front and center speakers, the surround speakers are used to handle mainly sound effects and sound will not come from them all the time.
Subwoofer	The position of the subwoofer is not so critical. Place it anywhere you like.

| CAUTION |

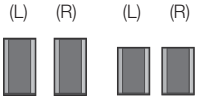
- Do not let children play with or near the speakers. They could get hurt if the speaker falls.
- When connecting the speaker wires to the speakers, make sure that the polarity (+/–) is correct.
- Keep the subwoofer out of the reach of children so as to prevent them from inserting their hands or alien substances into the duct (hole) of the subwoofer.
- Do not hang the subwoofer on the wall through the duct (hole).

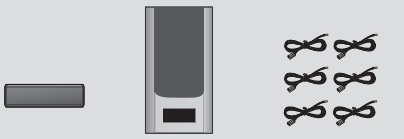
| NOTE |

- If you place a speaker near your TV set, screen colour may be distorted because of the magnetic field generated by the speaker. If this occurs, place the speaker away from your TV set.

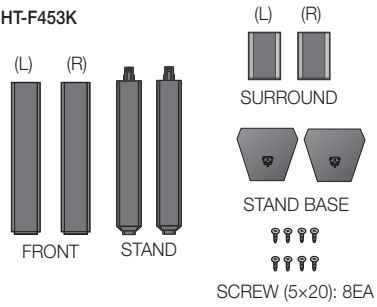
Speaker Components

HT-F450K

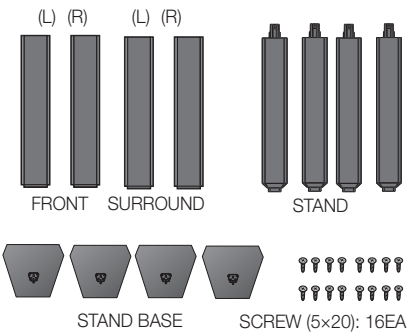




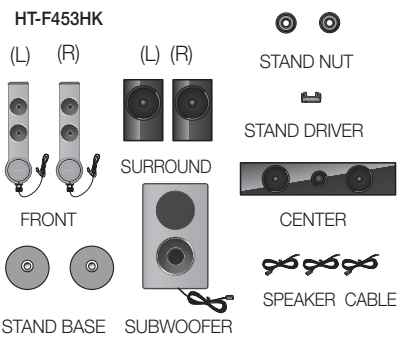
HT-F453K



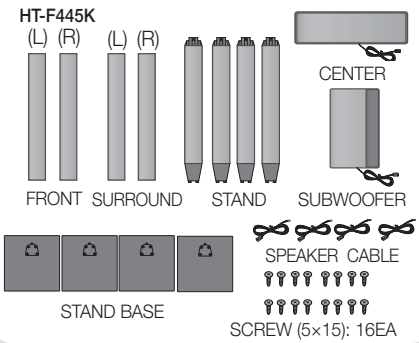
HT-F455K



HT-F453HK

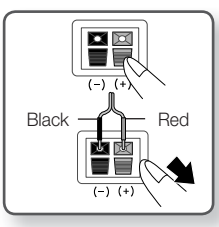


HT-F445K

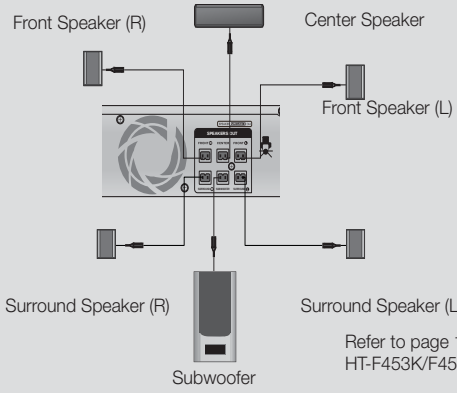


Connecting The Speakers

1. Press down the terminal tab on the back of the speaker.
2. Insert the black wire into the black terminal (–) and the red wire into the red terminal (+), and then release the tab.
3. Connect the connecting plugs to the back of the product by matching the colours of the speaker plugs to the speaker jacks.



In case of HT-F450K



Refer to page 11 for the speakers of HT-F453K/F453HK/F445K/F455K.

Installing the Speakers on the Tallboy Stand

*** HT-F453K only - Front Speakers**

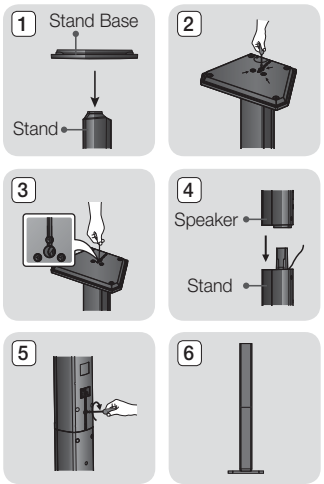
*** HT-F445K/F455K only - Front/Surround Speakers**

1. Turn the Stand Base upside-down and connect it to the Stand.
2. Use the driver to combine the screws on the 3 marked holes.

| CAUTION |

- When you use a torque screwdriver, be careful not to put excessive force. Otherwise, it runs idle or can be damaged. (torque screwdriver- below 15 kg.f.cm)

3. Straighten a supplied speaker wire to the gravity direction and put in the hole on the center of Stand Base.
4. Connect the upper Speaker to the assembled Stand.
5. Insert a screw clockwise into the hole on the rear of the speaker using a screwdriver. And then connect a speaker cable.
6. This is the appearance after the speaker is installed.Follow this steps to install other speaker.

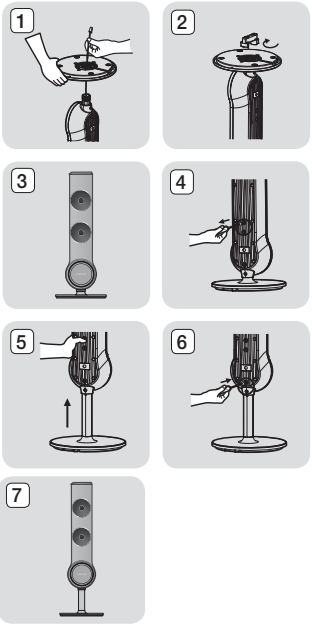


Installing the Speakers on the Half Tallboy Stand

*** HT-F453HK only - Front Speakers**

1. Stretch out the speaker cables as shown and arrange it through the hole of the stand base .
2. When done, use the stand driver to tighten the stand nut as shown.
3. This is the appearance after the speaker is installed. Follow these steps to install another speaker.
4. If you want to adjust the height of the speaker, loosen two screws on the rear of the speaker.
5. Pull up the speaker in the arrow direction. Fit the speaker in a height adjusting hole of your choice.

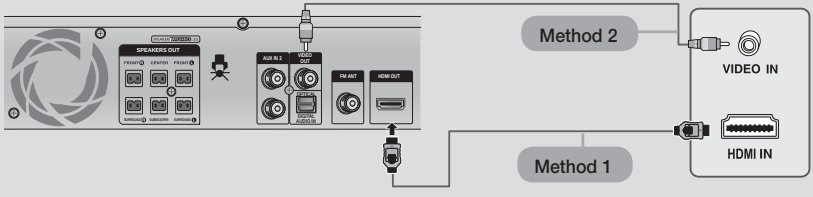
   ! **CAUTION :** Be careful as an excessive force may result in a physical damage.
6. Insert two screws clockwise into the hole on the rear of the speaker using a screwdriver as shown and tighten back 2 screws.
7. This is after the height of the speaker is adjusted. You can repeat these steps above at any time if you want to readjust the height.



Connecting to a TV

Select either Method 1 or Method 2.

- If you have set the product's remote control to operate your TV, press the **TV SOURCE** button on the remote control, and then select the correct external source from the TV's source list (HDMI, Video In, etc.) to view video from the home cinema.



Method 1 Connecting to a TV with an HDMI Cable - Best Quality (Recommended)

Connect an HDMI cable (option) from the HDMI OUT jack on the back of the product to the HDMI IN jack on your TV.

Method 2 Connecting to a TV with a Video Cable - Good Quality

Connect the supplied Video cable from the VIDEO OUT jack on the back of the product to the VIDEO IN jack on your TV.

| NOTE |

- Do not connect the unit through a VCR. Video signals fed through VCRs may be affected by copyright protection systems and the picture will be distorted on the television.

Using Anynet+(HDMI-CEC) (Samsung products only)

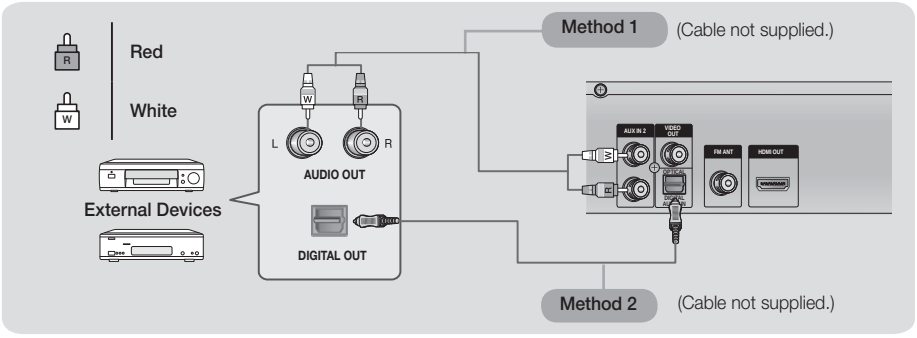
Anynet+ is a function that enables you to control other Samsung Devices with your Samsung TV's remote control. Anynet + can be used by connecting this product to a SAMSUNG TV using a HDMI Cable.

| NOTE |

- The Anynet+ function supports some buttons of the remote control.
- This function is not available if an HDMI cable does not support CEC.
- Please check the Anynet+ logo (If your TV has an Anynet+ logo, then it supports Anynet+ function.)

Connecting to External Devices

To select the correct mode for an external device, press the **FUNCTION** button. Each time you press the button, the mode changes in this order : **DVD/CD ➞ D.IN ➞ AUX 1 ➞ AUX 2 ➞ USB ➞ FM**



Method 1 AUX 2 : Connecting an External Analog Component

Connect **AUX IN 2** (Audio) on the back of the product to the Audio Out of the external Analog component.
⇨ Select the **AUX 2** mode.

| NOTE |

- Be sure to match the colors of the connecting jacks.
- You can connect the Video Output jack of your VCR to the TV, and connect the Audio Output jacks of the VCR to this product.
- If no button actions for more than 8 hours in AUX mode, the power will automatically turn off.

Method 2 OPTICAL : Connecting an External Digital Audio Component

Connect the **DIGITAL AUDIO IN (OPTICAL)** on the back of the product to the Digital Output of the external digital component. ⇨ Select the **D.IN** mode.

- If no OPTICAL signal for more than 25 minutes, the product will automatically turn off.

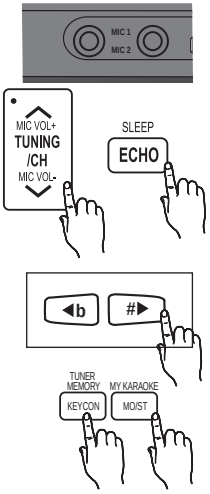
Connecting Microphone

You can enjoy the feeling of a karaoke bar in the comfort of your home.
Watch the video and sing along the lyrics displayed on the TV screen against the accompaniment.

1. Connect the microphone to the MIC jack on the front of the product.You can connect up to two microphones.
2. Press the **MIC VOL** button to adjust the volume of the microphone.
3. Press the **ECHO** button to adjust the echo level of the microphone.
4. During the playback, press the **KEYCON** button,then press the (**#**/**b**) button.

   Each time the (**#**) button is pressed, the key is increased,

   and each time the (**b**) button is pressed, the key is decreased.
5. Press the **MY KARAOKE** button to suppress the Vocal.Each time the button is pressed, the selection is changed as follows: Vocal Reduction → Original vocals.



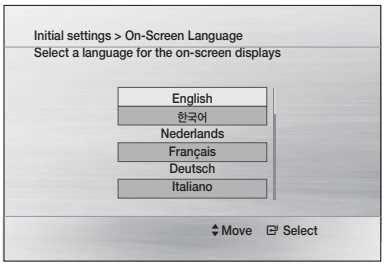
NOTE

- If you hear strange noises (squealing or howling) while using the Karaoke feature, move the microphone away from the speakers. Turning down the microphone's volume or the speaker volume is also effective.
- The microphone does not operate in the AUX and TUNER mode.
- When Speaker Selection is set to TV Speaker, The Microphone is not available.
- After setting my karaoke or the keycon,S.VOL/P.BASS/DSP(EQ)/GIGA/FOOTBALL/V-SURROUND does not work.
- MY KARAOKE function doesn't work in D.IN/DIVX state,KEYCON function doesn't work in D.IN/DIVX/USB/MP3/WMA state
- After the stop operation,the setting of my karaoke and keycon will disappear.
- MY KARAOKE function can be available when the microphone is connected or not,but KEYCON function can be available that the microphone must be connected.

The Initial Settings Procedure

Press the **POWER** button when it is plugged in TV for the first time. Initial Settings screen will be displayed.

▲▼ (select the desired language) → ⏎
→ ▲▼ (select the desired TV Aspect) → ⏎
→ ▲▼ (select the simple speaker setup) → ⏎.

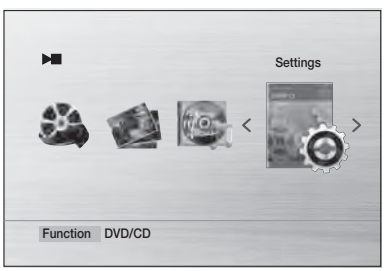


| NOTE |

- The initial screen may appear different, depending on the content of the disc.
- If the HDMI cable is connected to the product, TV aspect does not appear.
- If you want to display the Initial Setting screen again and make changes, select the Reset option.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user manual of your TV.

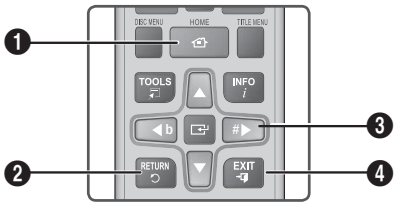
Accessing the Settings Screen

1 . Press the **POWER** button.



2 . Press the ◄► buttons to select **Settings**, then press the ⏎ button. The Settings screen appears.
3 . To access the menus, sub-menus, and options on the Settings screen, please refer to the remote control illustration below.

Buttons on the Remote Control Used for the Settings Menu



❶	**HOME** Button : Press to move to the Home screen.
❷	**RETURN** Button : Return to the previous menu.
❸	⏎ **(Enter) / DIRECTION** Button : • Press ▲▼◄► to move the cursor or select an item. • Press the ⏎ button to activate the currently selected item or confirm a setting.
❹	**EXIT** Button : Press to exit the current menu.

Display

TV Aspect

- **4:3 Pan-Scan**: Select when you want to see the 16:9 video supplied by the DVD without the black bars on top and bottom, even though you have a TV with a 4:3 ratio screen.
- **4:3 Letter Box**: Select when you want to see the total 16:9 ratio screen DVD supplies, even though you have a TV with a 4:3 ratio screen. Black bars will appear at the top and bottom of the screen.
- **16:9 Wide**: You can view the full 16:9 picture on your widescreen TV.

BD Wise

BD Wise is Samsung's latest inter-connectivity feature. When you connect a Samsung product and a Samsung TV with BD Wise to each other via HDMI, and BD Wise is on in both the product and TV, the product outputs video at the video resolution and frame rate of the DVD Disc.

| NOTE |

- This will optimize the picture quality according to the content (In the DVD disc, etc) that you want to play and the product or your BD Wise-compliant Samsung TV.

- If you want to change the resolution in BD Wise mode, you must set BD wise mode to Off in advance.
- BD Wise will be disabled if the product is connected to a device that does not support BD Wise.

Resolution

Sets the output resolution of the HDMI video signal. The i and p indicate interlace and progressive scan, respectively.

- **576p(480p), 720p, 1080i, 1080p, BD Wise**

| NOTE |

- The BD Wise menu item appears only if BD Wise is set to On.
- Depending on your TV, certain HDMI output resolutions may not work. Please refer to the user's manual of your TV.
- If Composite is connected, the resolution supports only 576i(480i).
- 1080P may not appear depending on TV.

HDMI Format

Lets you set the colour space format for the HDMI output to match the capabilities of the connected device (TV, monitor).

Video Out Signal(option)

Different countries apply different TV standard.
You can select from NTSC or PAL.

Audio

Simple Setup

It is the Function for selecting the Speaker Layout suitable with the layout type of the connected Speaker. That is two path to select:

1. **Settings → Audio → Simple Setup**
2. **Settings → System → Initial Setting → Simple Speaker Setup**

- Normal Mode: Use this option when the surround speakers are located behind you.
- Simple Mode: Use this option if the surround speakers are located in front of you.

- If Simple Mode is selected, Speaker Setting cann't be set.

Speaker Setting

Speaker Size

You can set the Speaker Size of the Center and Surround Speakers, as well as Test Tone in this mode.

Sound Edit

You can adjust the balance and level for each speaker.
Press the ▲▼ buttons to select and adjust the desired speaker.
Press the ◄► buttons to adjust the settings.

Delay Time

If the speakers cannot be placed at equal distances from the listening position, you can adjust the delay time of the audio signals from the Center and Surround speakers. You can also set the Test Tone in this mode.

| NOTE |

- The Delay Time menu will be activated only when a 5.1 channel source is played.
- You can not set Center and Surround in this mode when their Speaker Size is set to NONE.
- With AC-3, the delay time of surround can be set between 00 and 15mSEC.Center only can be set between 00 and 5mSEC.
- The Center channel is only adjustable on 5.1 channel discs.

Test Tone

Use the Test Tone feature to check the speaker connections.

- Press the ◄► buttons to select **On**.
- The test tone will be sent to **Front Left → Center → Front Right → Surround Right → Surround Left → Subwoofer** in order.
  To stop the test tone, press the RETURN button.

DRC (Dynamic Range Compression) send

This feature balances the range between the loudest and quietest sounds. You can use this function to enjoy Dolby Digital sound when watching movies at low volume at night.

AUDIO SYNC

Video and audio sync may not match with digital TV. If this occurs, adjust the audio delay time to match the video.

Speaker Selection

- Video is transmitted over the HDMI connection cable only, and audio is output through the product speakers only.
  ⇨ Select the **Home Theater**.
- Both video and audio signals are transmitted over the HDMI connection cable, and audio is output through your TV speakers only.
  ⇨ Select the **TV Speaker**.

| NOTE |

- The default setting of this function is Home Theater .
- HDMI Audio is automatically down-mixed to 2ch forTV speakers.

User EQ

You can configure the equalizer settings manually to your preference.

Karaoke Scoring

Karaoke score display can be toggled On or Off.

- Off : Turns off the karaoke score display.
- On : After the singing, the score is displayed on the screen.

| NOTE |

- In D.IN/USB/DIVX/MP3/WMA state,karaoke scoring does not work.
- Repeat function is not available during CD/DVD disc is played if karaoke scoring is set to on.

Audio Return Ch.

You can enjoy TV sound from the Home Cinema speakers by using just one HDMI cable.

| NOTE |

- When Anynet+ (HDMI-CEC) is Off, the Audio Return Channel function is not available.
- Using an ARC (Audio Return Channel)-uncertified HDMI cable may cause a problem in compatibility.
- ARC function is only available if an ARC-compliant TV is connected.
- ARC function is included in D.IN function on the main set.
- If no ARC signal for more than 25 minutes, the product will automatically turn off.

System

Initial Settings

By using the Initial Settings, you can set the language ,TV aspect and Simple Setup. (see page 16)

DivX(R) Registration

View DivX(R) VOD Registration Code to purchase and play DivX(R) VOD content.

| NOTE |

- This option is not activated if you select OK. To activate this option, please activate the DivX(R) Deactivation.
- Even after you reset the system, the settings of DivX Registration will not be reset.

DivX(R) Deactivation

Select this to get a new registration code.

Language

You can select the language you prefer for on-screen menu, disc menu, etc.

To select a language that does not appear in the menu, select OTHERS in the Disc Menu, Audio and Subtitle, and enter the language code of your country. For more information, refer to www.samsung.com or call to Samsung customer service center.

| NOTE |

- You cannot select OTHERS in the OSD Language menu.
- The selected language will only appear if it is supported on the disc.

Security

The Parental Lock function works in conjunction with DVDs that have been assigned a rating, which helps you control the types of DVDs that your family watches. There are up to 8 rating levels on a disc.

Parental Rating

Select the rating level you want to set. Enter the password and then press the ⏎ button.

- The password is set to "0000" by default.

Change Password

Select **Change** and enter the 4-digit password to set the parental lock using the number buttons on the remote control.

If you forgot your password

1. Remove the disc.
2. Press and hold the **STOP** (■) button on the remote control for 5 seconds or more. All settings will revert to the factory settings.

Support

Product Information

Provide the product information such as Model code, Softrware Version, etc.

Disc Playback

⏏ → Place a disc gently into the tray with the disc's label facing up → ⏏.

| NOTE |

- When you stop disc play, the product remembers where you stopped, so when you press ▶ button again, it will pick up where you left off. (Resume function works only with DVDs.)
  Press the ■ button twice during playback to disable the Resume function.
- Pirated discs will not play in this product because they violate the CSS (a copy protection system) recommendations.
- ⊘ will appear when an invalid button is pressed.
- If no button input is made for more than 5 minutes in Stop or Play (music) mode, the screen saver will get activated.
- If the product is left in the screen saver mode for more than 20 minutes, the power will automatically turn off. (Except during play a music)

Audio CD(CD-DA)/MP3/WMA Playback

1. Insert an Audio CD(CD-DA) or an MP3 Disc.
   - For an Audio CD, the first track will be played automatically.
     - Press the ⏮⏭ buttons to move to the previous/next track.
   - For the MP3/WMA disc, press the ◄► buttons to select **Music**, then press the ↵ button.
     - Press the ▲▼◄► buttons to select a desired file and press the ↵ button.
     - Press the ◀◀ ▶▶ buttons to move to the previous/next pages.
2. Press the ■ button to stop playback.

| NOTE |

- Some MP3/WMA-CDs may not play, depending on the recording mode.
- Table of contents of a MP3-CD varies depending on the MP3/WMA track format recorded on the disc.
- WMA-DRM files cannot be played.
- The product will automatically turn off from no Disc and Stop mode for more than 25 minutes.

JPEG File Playback

Insert a JPEG disc → ◄► (select **Photo**) → ▲▼ (select the desired folder) → ↵ → ▲▼ (select the desired photo) → ↵

- The selected file will play and slide show will start. To stop slide show, press the ❚❚ button.
- You can view the previous/next file by pressing the ◄,► buttons during the slideshow mode.

Rotate Function

Press the **GREEN(B)** or **YELLOW(C)** button during the PAUSE mode.

Using the Playback Function

Forward/Reverse Search

Press the ◀◀ ▶▶ buttons for Search Function.

| NOTE |

- No sound is played in search mode.
- The playback search produces sound only when searching at ▶▶1 and ▶▶2 speed.
- This function is available only for the CD-DA.

Skipping Scenes/Songs

Press the ⏮⏭ buttons.

- Each time the button is pressed during playback, the previous or next chapter, track or directory (file) will be played.
- You cannot skip chapters consecutively.

Slow Motion Play

Press the ❚❚ button and then ▶▶ button for Slow Motion play.

| NOTE |

- No sound is heard during slow playback.
- Reverse slow playback does not work.
- This function is available for the DivX/DVD.

Step Motion Play

Press the ❚❚ button repeatedly.

- The picture moves forward one frame each time the button is pressed during playback.

| NOTE |

- No sound is heard during step motion playback.
- This function is available for the DivX/DVD.

5 Minute Skip Function

During playback, press the ◄,► button.

- Playback skips 5 minutes forward whenever you press the ► button.
- Playback skips 5 minutes backward whenever you press the ◄ button.

| NOTE |

- This function is available only for the DivX that contains time information.

Using the Disc/Title Menu

During playback,

DISC MENU or **TITLE MENU** ➞ ▲▼◄► ➞ ⏎

- **Disc Menu** : You can view the menus for the audio language, subtitle language, profile, etc.
- **Title Menu** : For DVDs containing multiple titles, you can view the title of each movie.

| NOTE |

- Depending on the disc, menu setup items may vary and this menu may not be available.

Repeat Playback

DVD/DivX Repeat

You can repeat the title, chapter or the section(A-B Repeat) of the DVD/DivX.

1. During DVD/DivX playback, press the **REPEAT** button on the remote control.
2. Press the ▲▼ buttons to select a desired repeat mode, then press the ⏎ button.
3. Press the ▲▼ buttons to select **OFF** to return to normal play, then press the ⏎ button.

CD/MP3 Repeat

During the CD/ MP3 playback, press the **REPEAT** button repeatedly to select the repeat mode you want.

- **CD** : (Off) ➞ (Track) ➞ (All) ➞ (Random) ➞ (Section A-B)
- **MP3** : (Off) ➞ (Track) ➞ (Directory)➞ (All)➞ (Random)

A-B Repeat Playback

You can repeatedly play back a designated section of a DVD or CD.

1. During the DVD disc or CD playback, press the **REPEAT** button on the remote control.
2. For DVD, press the ▲▼ buttons to select **A-**. For CD press the **REPEAT** button repeatedly until A-B appears.
3. Press the ⏎ button at the point where you want repeat play to start (A).
4. Press the ⏎ button at the point where you want repeat play to stop (B).
5. To return to normal playback,
   For DVD, press the **REPEAT** button ,then press the ▲▼ buttons to select to OFF. For CD, press the **REPEAT** button to select to .

| NOTE |

- The A-B Repeat function does not operate with DivX, MP3 or JPEG discs.

Displaying Disc Information

1. During playback, press the **TOOLS** button on the remote control.
2. Press the ▲▼ buttons to select the desired item.
3. Press the ◄► buttons to make the desired setup change and then press the ⏎ button.
   - You may use the number buttons of the remote control to control some items.
4. To make Disc information disappear, press the **TOOLS** button again.

| NOTE |

- Some tools menus may differ depending on discs and files.

TOOLS menu

- **Title**( ) : To access the desired title when there is more than one in the disc.
- **Chapter**( ) : Most DVD discs are recorded in chapters so that you can quickly find a specific chapter.
- **Playing time**( ) : Allows playback of the film from a desired time. You must enter the starting time as a reference. The time search function does not operate on some discs.
- **Audio**( ): Refers to the film's soundtrack language. A DVD Disc can contain up to 8 audio languages.

- **Subtitle**( ): Refers to the subtitle languages available in the disc. You will be able to choose the subtitle languages or, if you prefer, turn them off from the screen. A DVD Disc can contain up to 32 subtitle languages.
- **Angle**( ): When a DVD contains multiple angles of a particular scene, you can use the Angle function.

TOOLS → ▲▼ (select **AUDIO**, **SUBTITLE** or **ANGLE**) **→ ◀▶** (select the desired option)

| NOTE |

- Depending on the disc, the Subtitle and Audio Language functions may not be available.
- The Angle function works only with discs on which multiple angles have been recorded.

Caption Function

- You must have some experience with video extraction and editing in order to use this feature properly.
- To use the caption function, save the caption file (*.smi) in the same file name as that of the DivX media file (*.avi) within the same folder.
- Up to 100 alphanumeric characters or 50 East Asian characters (2 byte characters such as Korean and Chinese) for the file name.
- The subtitle of DivX files are *.smi, *.sub, *.srt over 148 kbyte is not supported.

Using the Special Remote Control Buttons

P.BASS	P.BASS

The P.BASS function provides a bass boost to reinforce the low frequencies.

| NOTE |

- The P.BASS function is only available with 2 channel LPCM sources such as MP3, DivX, CD and WMA.

GIGA	GIGA

The GIGA Sound Function amplifies bass and improves bass twice as much for you to appreciate powerful real sound. (Subwoofer only)

|NOTE |

- The GIGA Sound works when in 2-channel LPCM mode only.
- GIGA doesn't work when connecting the microphone to the MIC jack.

S.VOL (smart volume)	S.VOL

This will regulate and stabilize the volume level against a drastic volume change when changing channels or during a scene transition.

SMART VOLUME ON ➞ SMART VOLUME OFF

S/W LEVEL	S/W LEVEL

You can also press the **S/W LEVEL** button on the remote control and use the ◀ or ▶ buttons to adjust the level of subwoofer.

DSP (Digital Signal Processor)/EQ	DSP/EQ

❑ **DSP (Digital Signal Processor)**

DSP modes have been designed to simulate different acoustic environments.

❑ **EQ**

You can select POPS, JAZZ , ROCK, or USER to optimize the sound for the genre of music you are playing.

| NOTE |

- The DSP/EQ function is only available in Stereo mode.
- The DSP/EQ function is not available while playing AC3 signal in 2.1 channel mode.
- Some regional EQs are special,such as India,Africa,and so on.Please refer to the display of actual product to operate.

FOOTBALL	FOOTBALL

Enjoy the music like on the soccer field with **FOOTBALL** button.

Each time you press the **FOOTBALL** button on the remote control.

FOOTBALL MODE ON → FOOTBALL MODE OFF

- FOOTBALL MODE ON: You will feel to enjoy music on the soccer field.

V SURROUND	V SURROUND

It is only operational when 2 Channel Audio is playing. It will change 2 channel Audio Source to 5.1 channel Sound and there is output.
Each time you press the **V-SURROUND** button on the remote control.

Virtual Surround on →Virtual Surround off

- Virtual Surround on: change 2 channel audio to 5.1 channel and there is Sound output by 5.1 channel.
- Virtual Surround off: Output of 2 channel Audio is Sound output by 2 channel. (Original Sound).

TV SOUND	TV SOUND

You can listen via Home Theater Speaker or TV Speaker with TV SOUND button.

1. Connect the HDMI cable to TV and Home theater.
2. Press the **TV SOUND** button on the remote control.
3. Each time you press the TV SOUND button, TV SOUND ON/OFF flashes shortly on the Display part on the Front panel, then change to D.IN. -TV SOUND ON : Output to Home Theater Speaker. -TV SOUND OFF : Output to Anynet+ connected TV Speaker.

❑ **Use in this case:**

1) If you want to listen to the sound via home theater speaker when you watch a TV.

2) If you want to listen to the sound from the USB media that plugged to the TV via home theater speaker.

❑ **TV SOUND ON/OFF support specification**

Connected TV	TV Anynet+ (HDMI-CEC) Setting	TV Sound ON	TV Sound OFF
Anynet+ (HDMI-CEC) supported TV	ON	O	O
	OFF	O	O
Anynet+ (HDMI-CEC) supported TV	No opeartion	O	O

▸ Make sure that D.IN function is changed to TV CEC ON state,otherwise ARC audio is not available .

Listening to Radio

Using buttons on the Remote Control

1. Press the **FUNCTION** button to select **FM**.
2. Tune in to the desired station.
   - **Preset Tuning 1** : You must first add a desired frequency as a preset. Press the ■ button to select **PRESET** and then press the **TUNING/CH** (∧∨) button to select the preset station.
   - **Manual Tuning** : Press the ■ button to select MANUAL and then press the **TUNING/CH** (∧∨) button to tune in to a lower or higher frequency.
   - **Automatic Tuning** : Press the ■ button to select **MANUAL** and then press and hold the **TUNING/CH** (∧∨) button to automatically search the band.

Setting Mono/Stereo

Press the **MO/ST** button.

- Each time the button is pressed, the sound switches between **STEREO** and **MONO**.
- In a poor reception area, select **MONO** for a clear, interference-free broadcast.

Presetting Stations

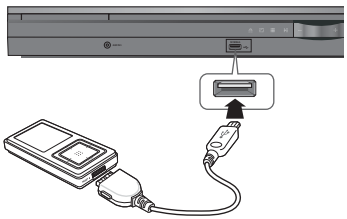
Example : Presetting FM 89.10 in the memory

1. Press the **FUNCTION** button to select FM.
2. Press the **TUNING/CH** (∧∨) button to select <89.10>.
3. Press the **TUNER MEMORY** button.
   - Number flashes on the display.
4. Press the **TUNING/CH** (∧∨) buttons to select preset number.
   - You can select between 1 and 15 presets.
5. Press the **TUNER MEMORY** button again.
   - Press the **TUNER MEMORY** button before number disappears from the display.
   - Number disappears from the display and the station is stored in memory.
6. To preset another station, repeat steps 2 to 5.

USB Function

Playing Media Files using the USB Host Feature

You can enjoy media files such as pictures, movies and music saved on an MP3 player, USB memory stick or digital camera in high quality video with 5.1 channel sound by connecting the storage device to the USB port of the product.



1. Connect the USB device to the USB port on the front panel of the product.
2. Press the **FUNCTION** button to select USB.
   - **USB** appears on the display screen and then disappears.
3. Press the ◄► buttons to select **Videos**, **Photos** or **Music**.
   - Select a file to play.

Safe USB Removal

To prevent damage to the memory stored in the USB device, perform safe removal before disconnecting the USB cable.

- Press the **YELLOW(C)** button.
  - **REMOVE** will appear on the display.
- Remove the USB cable.

| NOTE |

- Remove the USB cable from the USB port slowly. Otherwise, it may cause damage to the USB port.
- The product will automatically turn off from no USB and Stop mode for more than 25 minutes.

USB Recording

While playing CD-DA using the USB Recording function or listening to the FM radio or receiving audio source from an external device, you can record the audio source in the USB memory.

Ex) USB recording of CD-DA audio contents

1. Connect the USB device to your product.
2. Insert the CD-DA disc into the CD tray.
3. Press the **USB REC** button on the remote control.
   - To start recording the current track, press the USB REC button on the remote control while the system is playing a track or stopped temporarily.
   - To record the entire CD, press and hold the USB REC button on the remote control.
     - "FULL RECORDING" appears on the displayand recording starts.
4. Press the ■ button to stop recording.
   - When USB recording of a CD is completed, you will find a new folder named “RECORDING” in the USB drive. The contents will be saved in the folder in the MP3 format.
   - When USB recording of FM radio or AUX source is completed, you will find a new folder named “TUNER RECORDING or AUX RECORDING” in the USB drive. The contents will be saved in the folder in the MP3 format.

| NOTE |

- Do not disconnect the USB connection or the power cable during the USB Recording. Otherwise, it may cause damage to the data.
  To stop USB Recording, press the ■ button and disconnect the USB device after the system stops playing the CD completely.
- If you disconnect the USB connection during the USB Recording, the system will turn off and you will not be able to delete the recorded file.
- If you connect the USB device to the system while it is playing a CD, the system stops temporarily and will play again.
- If the recording duration is less than 5 seconds, a recording file may not be created.
- USB Recording works only if the USB device is formatted in the FAT file system. (The NTFS file system is not supported.)
- The audio signal will not be output during USB recording of the CD in no MIC connecting state.Otherwise,The audio signal will be output during USB recording of the CD in MIC connecting state.
- When Speaker selection is set to TV Speaker, the USB Recording function is not supported.
- Disconnect the microphone to the set during recording, recording will be stopped.
- The set will be started X3 recording when the Microphone doesn't connect to the set.
- Any button except Stop /Volume/Mute/ Mic Volume/Echo button doesn't work during USB recording.

Troubleshooting

Refer to the chart below when this product does not function properly. If the problem you are experiencing is not listed below or if the instruction below does not help, turn off the product, disconnect the power cord, and contact the nearest authorized dealer or Samsung Electronics Service Centre.

Symptom	Check/Remedy
I cannot eject the disc.	• Is the power cord plugged securely into the outlet? • Turn off the power and then turn it back on.
Playback does not start.	• Check the region number of the DVD. DVD discs purchased from abroad may not be playable. • CD-ROMs and DVD-ROMs cannot be played on this product. • Make sure that the rating level is correct.
Playback does not start immediately when the Play/Pause button is pressed.	• Are you using a deformed disc or a disc with scratches on the surface? • Wipe the disc clean.
Sound is not produced.	• No sound is heard during fast playback, slow playback, and step motion playback. • Are the speakers connected properly? Is the speaker setup correctly customized? • Is the disc severely damaged?
Sound can be heard only from a few speakers and not all 6.	• On certain DVD discs, sound is output from the front speakers only. • Check if the speakers are connected properly. • Adjust the volume. • When listening to a CD, radio or TV, sound is output to the front speakers only. Select V-SURROUND (Virtual Surround) on the remote control to use all six speakers.
Dolby Digital 5.1 CH Surround Sound is not produced.	• Is there "Dolby Digital 5.1 CH" mark on the disc? Dolby Digital 5.1 CH Surround Sound is produced only if the disc is recorded with 5.1 channel sound. • Is the audio language correctly set to Dolby Digital 5.1-CH in the information display?
The remote control does not work.	• Is the remote control being operated within its operation range of angle and distance? • Are the batteries drained? • Have you selected the correct mode (RECEIVER DVD/TV)?
• Disc is rotating but no picture is produced. • Picture quality is poor and picture is shaking.	• Is the TV power on? • Are the video cables connected properly? • Is the disc dirty or damaged? • A poorly manufactured disc may not be playable.
Audio language and subtitles do not work.	• Audio language and subtitles will not work if the disc does not contain them.
The Disc/Title menu screen does not appear even when the Disc/Title function is selected.	• Are you using a disc that does not contain menus?

Symptom	Check/Remedy
Aspect ratio cannot be changed.	• You can play 16:9 DVDs in 16:9 WIDE mode, 4:3 LETTER BOX mode, or 4:3 PAN SCAN mode, but 4:3 DVDs can be seen in 4:3 ratio only. Refer to the DVD disc jacket and then select the appropriate function.
• **The product is not working. (Example: The power goes out or the front panel key doesn't work or a strange noise is heard.)** • **The product is not working normally.**	• Press and hold the ■ button on the remote control for longer than 5 seconds with no disc (reset function). **Using the RESET function will erase all stored settings. Do not use this unless necessary.**
The rating level password has been forgotten.	• While "**NO DISC**" message appears on the display of the product, press and hold the remote control's ■ button for longer than 5 seconds. "**INIT**" appears on the display and all settings will return to the default values. And then press the **POWER** button. **Using the RESET function will erase all stored settings. Do not use this unless necessary.**
Can't receive radio broadcast.	• Is the antenna connected properly? • If the antenna's input signal is weak, install an external FM antenna in an area with good reception.

Specifications

General	Weight	2.3 Kg
	Dimensions	430 (W) x 61 (H) x 242 (D) mm
	Operating Temperature Range	+5°C to +35°C
	Operating Humidity Range	10 % to 75 %
FM Tuner	Signal/noise ratio	60 dB
	Usable sensitivity	10 dB
	Total harmonic distortion	1%
Disc	DVD (Digital Versatile Disc)	Reading Speed : 3.49 ~ 4.06 m/sec.
		Approx. Play Time (Single Sided, Single Layer Disc) : 135 min.
	CD : 12cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec.
		Maximum Play Time : 74 min.
	CD : 8cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec.
		Maximum Play Time : 20 min.
Video Output	Composite Video	576i(480i)
		1 channel : 1.0 Vp-p (75 Ω load)
Video/Audio	HDMI	1080p, 1080i, 720p, 576p(480p)

Other Information

Amplifier	Front speaker output	167W x 2(3Ω)
	Centre speaker output	165W(3Ω)
	Surround speaker output	167W x 2(3Ω)
	Subwoofer speaker output	167W(3Ω)
	Frequency response	20Hz~20KHz
	S/N Ratio	65dB
	Channel separation	55dB
	Input sensitivity	(AUX)800mV

Speaker

Speaker system	5.1ch speaker system			
	Front	Surround	Centre	Subwoofer
Impedance	3 Ω	3 Ω	3 Ω	3 Ω
Frequency range	140Hz~20kHz	140Hz~20kHz	140Hz~20kHz	20Hz~160Hz
Output sound pressure level	86dB/W/M	86dB/W/M	86dB/W/M	88dB/W/M
Rated input	167W	167W	165W	167W
Maximum input	334W	334W	330W	334W

Dimensions (W x H x D) (Unit : mm)

	Front	Surround	Centre	Subwoofer
HT-F450K	95 x 144 x 74	95 x 116 x 74	227 x 95 x 74	220 x 380 x 363
HT-F453K	94.8 x 1112 x 74.5 * Stand base: 276 x 189	95 x 116 x 74		
HT-F455K	94.8 x 1112 x 74.5 * Stand base: 276 x 189	94.8 x 1112 x 74.5 * Stand base: 276 x 189		
HT-F453HK	120 x 612 x 71 mm *stand base : 210 x 210	90 x 141 x 68	360 x 74 x 68	200 x 390 x 356
HT-F445K	89 x 1053 x 71 mm *stand base : 229 x 229	89 x 1053 x 71 mm *stand base : 229 x 229	228 x 77 x 70	168 x 350 x 285

Weights (Unit : kg)

	Front	Surround	Centre	Subwoofer
HT-F450K	0.37	0.35	0.51	6.84
HT-F453K	2.86	0.35		
HT-F455K	2.86	2.86		
HT-F453HK	1.8	0.62	0.88	6.06
HT-F445K	2.93	2.93	0.49	3.67

*: Nominal specification

- Samsung Electronics Co., Ltd reserves the right to change the specifications without notice.
- Weight and dimensions are approximate.
- Design and specifications are subject to change without prior notice.
- For the power supply and Power Consumption, refer to the label attached to the product.

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The implementation was written so as to conform with Netscapes SSL.

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